

Automotive Maintenance and Light Repair (MLR)

Update #2 – see highlights on page 2

Purpose

To evaluate each contestant's preparation for employment in the Automotive Service Industry.

To recognize outstanding students for excellence and professionalism in the field of Automotive Maintenance and Light Repair.

Please be familiar with the General Regulations, Skills USA Championship Technical Standards. The Maryland State Finals Event Technical Standards detailed below are based on the Championship Standards and have some minor modifications.

Eligibility

Open to active Skills USA members enrolled in career and technical programs with an automotive technician or automotive service objective.

All Maintenance and Light Repair contestants must create a resume. The printed resume must be presented along with their Proof of Training form at on-site registration.

Clothing Requirement

All contestants must wear a neat and clean professional uniform as detailed below:

1. Light blue work shirt with or without the Skills USA logo. To be worn tucked in.
2. Navy work pants.
3. Automotive service belt that will not damage the vehicle finish.
4. Black or brown safety toe work footwear.
5. Safety glasses with side shields or goggles. (Prescription glasses can be used only if they are equipped with side shields. If not, they must be covered with goggles.)

Equipment and Materials

All equipment and supplies will be furnished by the Event Chair.

Scope of the 2025 Contest

1. All contestants will complete the Automotive Technology exam.
2. Contestants will then be rotated through the following test stations:
 - A. Engine Mechanical Inspection and Maintenance
 - B. Engine Performance Diagnosis and Testing

Please Note: Contestants will be using the Autel MAXIcom MK808S Automotive Diagnosis and Analysis System scan tool along with provided factory service information.

- C. Vehicle Body Electrical Diagnosis and Testing
- D. Automatic Transmission Maintenance
- E. Manual Drivetrain Maintenance
- F. Suspension, Steering and Maintenance
- G. Brake Service Inspection and Service
- H. Electronic Service Information
- I. Environment, Health, and Safety Knowledge exam.

Contestants will be judged on:

1. Accuracy related to measurements, specifications, math, and grammar.
2. Legibility (easy to read).
3. Task completeness.
4. Neatness and courtesy, showing care and orderliness.
5. Health and Safety. Observation of health and safety procedures and rules.

The following are examples of skills contestants may be required to demonstrate:

1. Using a dial indicator to measure end play, runout, or free play.
2. Using a micrometer and caliper to measure diameter or thickness.
3. Using Plastigauge to measure oil clearance.
4. Using a feeler gauge to measure clearance.
5. Using a scan tool to access diagnostic trouble codes, service data, component active tests, and live serial data.
6. Accurately utilize and interpret information to determine if a component or system operates correctly.
7. Use a DVOM to measure voltage, resistance, and amperes.
8. Accurately interpret wiring diagrams to diagnose electrical problems and/or construct a circuit.